

NOTES ON THE DISTRIBUTION, NATURAL HISTORY AND VARIATION
OF *HEMIDACTYLUS ALBOFASCIATUS* (GRANDISON AND SOMAN, 1963)
(SQUAMATA: GEKKONIDAE)

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Recently collected specimens of *Hemidactylus albofasciatus* from Malvan, Sindhudurg district, Maharashtra, represent a new locality record of this species and extend the species' known range southwards. Observations of these geckos provide new insights into the habitat and distribution of this uncommon species. Data from these specimens and others in the Collection of the Bombay Natural History Society (BNHS) permit the assessment of morphological variation with respect to published information about this species. In view of lack of proper taxonomic characters we take this opportunity to provide detailed description of this species.

Key words: *Hemidactylus albofasciatus*, BNHS Collection, taxonomy, natural history, new locality, habitat

INTRODUCTION

Hemidactylus albofasciatus a small, slender gecko was described by Grandison and Soman in 1963 from a series of specimens from Dorle, Dabhil and Gavakhadi villages, Ratnagiri district, Maharashtra. It has a snout vent length (SVL) of 29.6 mm, and is one of the most uncommon Indian geckos. Information on this species, except the data presented in its original description, is scarce.

Recently, this species was included in the genus *Teratolepis* (Kluge 2001; Das 2003), presumably, based on the presence of enlarged scales on the tail and narrow digital lamellae. However, a recent molecular phylogenetic analysis (cyt b, ND4, RAG-1 and PDC genes) by Bauer *et al.* (2008) reveals that *Teratolepis* is imbedded within the Tropical Asian clade of *Hemidactylus*. Apart from this, it was also evident from morphological characters that *H. albofasciatus*, with small granular scales intermixed with enlarged tubercles, is closer in dorsal pholidosis to species of *Hemidactylus* than to the other species (*T. fasciatus*, now *H. imbricatus*) previously allocated to *Teratolepis*. Variation in the degree of lamellar division is also high across *Hemidactylus*, however there is a tendency towards undivided lamellae in Indian members of the genus, culminating in *H. anamallensis* (Bauer and Russell 1995).

Recently, five specimens of *H. albofasciatus* were collected from Malvan in the Sindhudurg district of Maharashtra, and deposited in the collections of the Bombay Natural History Society (BNHS). We have also collected four specimens of this species from Dabhil-Ambere in Ratnagiri district. Apart from this, the BNHS collection also houses

7 previously collected specimens of this species, including the holotype. As information about the habitat, natural history, and morphological variation of this species is meagre, we take this opportunity to provide additional information. Apart from this, there are ambiguities regarding some unique morphological characters, like dorsal pholidosis, digit morphology and coloration, which play a vital role in taxonomy. We redescribe the species in greater detail to avoid further taxonomic confusion.

MATERIAL AND METHODS

The specimens of *H. albofasciatus*, BNHS 1841-1842, BNHS 1852-1853, BNHS 1867 and BNHS 1952 from Malvan, Sindhudurg district, and BNHS 1579-1582 from Dabhil-Ambere, Ratnagiri district, Maharashtra, were collected, fixed in 10% formalin, and transferred into 70% ethanol. Mensural and meristic features of these specimens are reported in Table 1. Measurements taken with a Dial Caliper (to the nearest 0.05 mm) were: snout-vent length (SVL; from tip of snout to vent), trunk length (TRL; distance from axilla to groin measured from posterior edge of forelimb insertion to anterior edge of hindlimb insertion), body width (BW; maximum width of body), crus length (CL; from base of heel to knee); tail length (TL; from vent to tip of tail), tail width (TW; measured at widest point of tail); head length (HL; distance between retroarticular process of jaw and snout-tip), head width (HW; maximum width of head), head height (HH; maximum height of head, from occiput to underside of jaws), forearm length (FL; from base of palm to elbow); orbital diameter (OD; greatest diameter of orbit), nares to



Fig. 1: Dorsal view of the mid-body of *Hemidactylus albofasciatus*, (BNHS 1852). Note the dorsal pholidosis

eye distance (NE; distance between anterior-most point of eye and nostril), snout to eye distance (SE; distance between anterior-most point of eye and tip of snout), eye to ear distance (EE; distance from anterior edge of ear opening to posterior corner of eye), interorbital distance (IO; shortest distance between left and right supraciliary scale rows).

Meristic data recorded for all specimens were number of supralabial scales (SL), infralabial scales (IL), preloacal pores (PCP), and lamellae under digits of manus (MLam) and pes (PLam) for both left (L) and right (R) sides. Scale counts and external observations of morphology were made using a Wild M5 dissecting microscope.

RESULTS

Variation in morphological characters

Though the original description of *H. albofasciatus* was based on 30 specimens, morphological characters, like dorsal pholidosis, digit morphology, and coloration, which play fundamental role in taxonomy, were imprecisely described by Grandison and Soman (1963).

The maximum length of *H. albofasciatus* was reported by Grandison and Soman (1963) as 29.6 mm SVL, with tail length as much as 26.5 mm. Several of our specimens exceed this, and one specimen (BNHS 1580) is of an appreciably larger size of 34.8 mm SVL and 35.70 mm TL (Table 1).

Grandison and Soman (1963) described the dorsum as ‘back with small, keeled granules, intermixed with larger trihedral tubercles, which are twice as large as the granules. About 80 mid-body scales. Tubercles arranged irregularly, separated by one to three granular scales.’ As per our observation, dorsal scales are heterogeneous, small, conical, keeled, and striated; intermixed with irregularly arranged, enlarged, conical, strongly keeled and striated tubercles, which are roughly twice the size of adjacent scales (Fig. 1).

The tail of *H. albofasciatus* was described by Grandison

Table 1: Mensural data for the specimens of *Hemidactylus albofasciatus*

BNHS No.	148	1247	1248	1249	1250	1251	1579	1580	1581	1582	1841	1842	1852	1853	1867	1952
SVL	29.8	34.3	30.3	29.1	30.0	28.7	29.3	34.8	30.7	30.3	33.7	26.0	31.2	30.8	27.2	29.5
TRL	14.2	15.5	12.5	12.0	12.4	11.0	13.0	15.9	13.1	12.7	16.0	11.3	14.8	14.2	13.2	12.9
BW	4.8	5.9	4.8	5.2	4.7	4.7	5.1	6.7	5.1	6.0	4.5	3.5	6.8	6.6	5.2	5.7
CL	4.9	4.8	4.8	4.9	4.8	4.3	5.1	5.5	5.0	4.9	5.0	4.2	4.5	4.7	4.5	4.7
TL	27.5	-	31.2	21.60*	-	19.10*	20.1*	35.7	18.3*	29.7	21.0*	28.7	29.1	9.10*	28.1	11.5*
TW	2.9	-	3.5	3.2	-	3.1	3.7	4.9	3.1	3.4	3.0	2.3	3.6	3.3	3.0	3.3
HL	9.0	10.2	9.5	9.1	9.2	9.2	9.5	10.5	9.3	9.2	10.7	8.3	9.6	10.0	8.9	10.0
HW	5.4	6.4	5.8	5.9	5.4	5.5	6.0	6.9	6.0	6.0	6.2	4.7	6.0	6.6	4.8	6.3
HH	3.9	4.1	4.0	3.8	3.8	3.5	3.9	4.2	3.8	3.8	4.0	3.1	3.4	3.8	3.2	4.0
FL	4.4	4.6	4.2	4.5	4.1	4.2	4.5	4.7	4.2	4.3	4.8	3.6	4.4	4.6	4.1	4.1
OD	2.3	2.1	2.1	2.1	2.1	2.1	2.0	2.2	1.9	2.0	2.2	1.6	2.2	2.2	1.9	2.0
NE	2.8	2.6	2.3	2.4	2.5	2.3	2.5	2.6	2.5	2.6	2.9	2.4	2.7	2.6	2.4	2.4
SE	3.7	4.0	3.6	3.7	4.0	3.9	3.4	4.0	3.2	3.4	3.7	3.0	3.3	3.6	3.1	3.6
EE	2.7	3.5	2.9	2.9	3.1	3.0	2.5	3.3	2.9	2.8	3.1	2.5	2.6	2.7	2.1	2.9
IO	2.5	2.5	2.5	2.4	2.3	2.5	3.1	3.1	2.2	2.4	3.3	2.5	2.7	3.0	2.5	3.1

Abbreviations as in Materials and Methods section; all measurements in mm. Asterisk refers to damaged/missing tail.

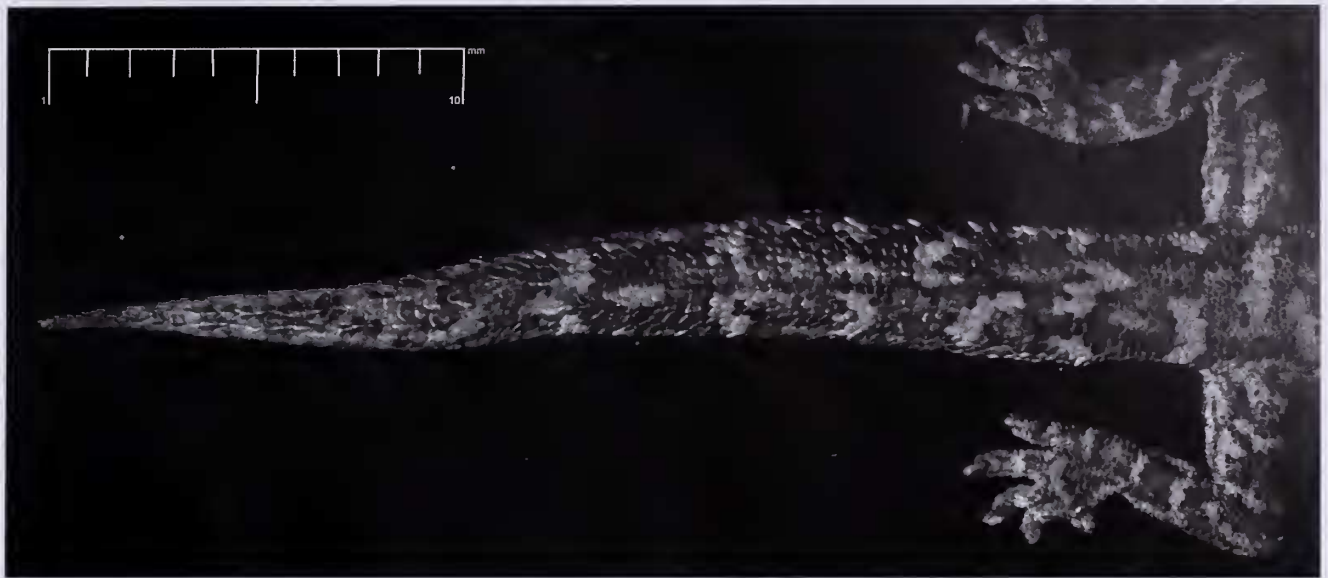


Fig. 2: Dorsal view of tail of *Hemidactylus albofasciatus* (BNHS 1852). Note the smaller size of scales

and Soman (1963) as ‘round in section, tapering, verticillate covered above with faintly keeled, pointed, imbricate scales; in the middle of each whorl and to either side of the vertebral line are two longitudinal rows of larger, pointed, keeled scales.’ As per our observation on fresh specimens in the BNHS collection, the tail is covered above with large, flat, weakly pointed, strongly imbricate and striated scales with a series of two to four rows of much larger, flat, strongly pointed, keeled and striated scales on either side of median furrow (Fig. 2).

Apart from the shape and size of the body, toe morphology is also an indicator of habit among species of *Hemidactylus* (Bauer *et al.* 2008; Giri *et al.* 2008). Grandison

and Soman (1963) mentioned: ‘digits free, with little dilation; distal joints rather short’. According to us digits are short, clawed; terminal phalanx of all digits curved, arising angularly from distal portion of expanded lamellar pad, less than half as long as associated pad. They described lamellae as ‘in a straight transverse series; undivided except for the penultimate and two or three more proximal plates, which are notched; eight or nine, exceptionally ten lamellar plates under the fourth toe, five under the first toe’. Our observations of material from the BNHS collection confirm these ranges except that the lamellae are in oblique series, there are four to six lamellae under the first toe and three to five proximal lamellae under

Table 2: Meristic data for the specimens of *Hemidactylus albofasciatus*

BNHS No.	MLam L	MLam R	PLam L	PLam R
148	5(1)-6(3)-7(3)-7(3)-7(3)	5(1)-6(2)-7(3)-7(3)-7(3)	5(1)-6(3)-8(3)-8(3)-8(4)	5(1)-6(2)-8(3)-9(3)-8(4)
1247	5(1)-6(3)-7(3)-7(3)-7(3)	5(1)-6(3)-7(3)-7(3)-8(3)	0-7(3)-8(3)-9(4)-8(2)	5(1)-7(4)-7(3)-10(4)-8(3)
1248	0-6(3)-6(3)-7(3)-7(3)	0-6(3)-7(3)-7(3)-8(3)	0-7(3)-8(3)-9(4)-8(2)	5(1)-7(4)-7(3)-10(4)-8(3)
1249	5(1)-6(2)-6(2)-7(3)-7(3)	5(1)-0-0-7(3)-7(3)	5(1)-6(2)-7(3)-9(4)-8(3)	5(1)-6(2)-7(3)-9(3)-6(2)
1250	5(1)-6(2)-7(3)-7(3)-7(3)	0-0-0-0-0	5(1)-6(2)-7(3)-7(3)-7(3)	5(1)-7(3)-8(3)-9(3)-6(3)
1251	5(2)-6(3)-6(3)-7(4)-7(3)	5(1)-6(3)-0-7(4)-6(3)	5(1)-7(3)-7(3)-9(4)-8(3)	5(2)-0-8(3)-9(4)-7(3)
1579	5(2)-7(4)-7(4)-7(4)-6(3)	5(2)-7(3)-7(4)-7(4)-7(3)	5(2)-7(3)-8(4)-10(4)-8(4)	5(2)-7(3)-8(4)-10(5)-8(4)
1580	5(1)-6(3)-7(3)-7(3)-7(3)	5(1)-6(3)-0-7(3)-7(3)	6(2)-6(4)-8(4)-9(4)-8(3)	6(2)-6(4)-8(4)-9(4)-8(4)
1581	6(1)-6(3)-7(3)-7(3)-7(3)	5(1)-6(3)-7(3)-7(3)-7(2)	6(1)-7(3)-8(3)-9(4)-8(3)	6(1)-7(3)-8(3)-10(4)-8(3)
1582	5(1)-6(2)-6(3)-7(3)-7(3)	5(1)-6(2)-6(2)-7(2)-7(2)	5(1)-7(3)-8(3)-8(3)-8(3)	5(1)-7(2)-8(2)-9(3)-8(3)
1841	5(1)-6(2)-7(3)-7(3)-7(3)	5(1)-6(2)-6(3)-7(3)-7(3)	5(1)-6(3)-7(3)-10(4)-8(3)	5(2)-6(3)-7(3)-10(4)-8(3)
1842	5(1)-6(2)-7(3)-7(3)-7(2)	5(2)-6(2)-7(2)-7(2)-7(2)	5(1)-6(2)-7(3)-9(4)-7(3)	5(1)-6(2)-7(3)-9(4)-7(2)
1852	5(1)-6(3)-7(3)-7(3)-7(3)	5(1)-6(3)-7(3)-7(4)-7(3)	4(1)-7(4)-8(4)-9(5)-8(4)	4(1)-6(3)-8(4)-9(5)-9(4)
1853	5(1)-6(2)-7(3)-7(3)-7(3)	5(1)-6(2)-7(3)-7(3)-7(3)	4(1)-7(3)-8(3)-9(3)-8(3)	4(1)-6(3)-8(4)-9(4)-9(3)
1867	5(1)-6(3)-6(3)-7(3)-6(2)	5(1)-6(2)-6(3)-7(3)-6(3)	4(1)-6(3)-7(4)-8(4)-0	5(1)-6(3)-7(4)-9(4)-8(3)
1952	5(1)-6(3)-7(3)-7(3)-7(3)	5(1)-6(3)-7(3)-7(3)-7(3)	5(1)-7(3)-7(4)-9(4)-8(3)	5(1)-6(3)-0-9(5)-8(3)

Values in parenthesis represent the number of notched lamellae.
 ‘0’ indicates damaged lamellae

the fourth toe which are notched (Fig. 3) (Table 2).

We did not observe any variation in the number of precloacal pores. There are 7-8 precloacal pores in the seven males studied by us.

Grandison and Soman (1963) described the coloration of *H. albofasciatus* as 'ground colour dark brown; a whitish streak, two scales wide, runs from the nostril through the eye to above the ear. Ten narrow, somewhat wavy, whitish bands run transversely from behind the eyes to the hind limbs; interspaces three times the width of a band. Tail similarly cross-banded at each alternate whorl. Ventral surfaces cream with fine brown speckling. A longitudinal, mid-ventral dark line is present on the tail.' Though the coloration was described in the original description, we observed some variation in our material.

Detailed description

Thus, in view of the above mentioned variations and to discuss morphological characters in detail we provide herewith a detailed description based on recently collected material and specimens in the Collection of the BNHS (BNHS 1247-1251), including the holotype (BNHS 148).

Body slender, SVL 26.0-34.8 mm. Head short (HL/SVL = 0.3-0.33), slightly elongate (HW/HL = 0.54-0.66), not strongly depressed (HH/HL ratio 0.35-0.43), distinct from neck. Loreal region not inflated, canthus rostralis not prominent. Snout short (SE/HL = 0.34-0.43); slightly longer than twice as long as eye diameter (OD/SE = 0.53-0.67); scales on snout and canthus rostralis juxtaposed, smooth, weakly conical, slightly larger in size than those on forehead; occipital and interorbital region with much smaller, conical granular scales. Eye small (OD/HL = 0.19-0.26); pupil vertical with crenulated margins; supraciliaries small, pointed, those at the anterior end of orbit slightly larger. Ear opening very small, oval and oblique; eye to ear distance slightly greater than diameter of eye (EE/OD = 1.11-1.67). Rostral wider than deep, slightly notched, divided mid-dorsally by weakly developed rostral groove; one enlarged internasal separated by one or two small scales, two postnasals, of which posterior is larger; rostral in contact with first supralabial, supranasals, and a single internasal; nostrils circular, each surrounded by supranasal, rostral, first supralabial, and two subequal postnasals; 2-3 rows of scales separate orbit from supralabials. Mental triangular; two pairs of postmentals, inner pair single, larger and in contact behind mental, outer postmental is medially divided; inner postmental is bordered by mental infralabial 1, posterior postmentals and two chin scales; outer postmental is bordered by inner postmental, infralabial 2, and three to four enlarged chin scales. Infralabials bordered by single row of enlarged scales that grade into granules medially



Fig. 3: Ventral view of the lamellae of right pes of *Hemidactylus albofasciatus* (BNHS 1852).
Note notched lamellae

and posteriorly. Supralabials to mid-orbital position 6, to angle of jaw 7-9; infralabials to angle of jaw 7. Body relatively elongate (TRL/SVL = 0.38-0.49). Ventrolateral skin folds inconspicuous, without denticulate edges. Dorsal scales heterogeneous, small, conical, keeled, and striated; intermixed with irregularly arranged, slightly enlarged, conical, strongly keeled and striated tubercles, extending from neck to tail; each enlarged tubercle roughly twice the size of adjacent scale and surrounded by rosette of 8-9 small scales, 2-4 scales between adjacent enlarged tubercles. Ventral scales larger than dorsal, smooth, imbricate, slightly larger on abdomen and precloacal region than on chest (Fig. 5, Ventral, full body); midbody scale rows across venter to lowest row of tubercles 28-30; gular region with smallest and rounded granules, anterior gular scales are much larger than the rest. Scales on palms and soles smooth, rounded; scales on dorsal aspect of forelimb flat, larger than those on body dorsum, imbricate and strongly striated; dorsal scales on thigh larger, flattened and striated, those on the back of the thigh are smaller, conical, keeled and striated. Fore- and hind limbs relatively short, thin; forearm short (FL/SVL ratio 0.13-0.150.14); tibia short



Fig. 4: Live *Hemidactylus albofasciatus* (specimen not collected). Note the coloration

(CL/SVL ratio 0.14-0.170.14); digits moderately short, strongly clawed; all digits of manus and digits I-IV of pes indistinctly webbed; terminal phalanx of all digits curved, arising angularly from distal portion of expanded lamellar pad, less than half as long as associated pad; scansors beneath each toe undivided, the plate adjacent to terminal scansor is, however, deeply notched and the two or three next proximal plates are less strongly so; scansors (from proximal-most at least twice diameter of palmar scales to distal-most single scansor, number of notched lamellae in parentheses): 5(1)-6(2/3)-6/7(2/3)-7(3/4)-6/8(2/3) (right manus), 4/6(1/2)-6/7(2/4)-7/8(3/4)-9/10(3/5)-6/9(2/4) (right pes). Tail cylindrical, tapering to a fine point, with a median furrow, oval in section, flat beneath; length of original, entire tail is more or less equal to snout-vent length (TL/SVL ratio 0.92-1.10 (n=7)); tail covered above with large (much larger than those on the dorsum), flat, weakly pointed, strongly imbricate and striated scales with a series of two to four rows of much larger, flat, strongly pointed, keeled and striated scales on either side of median furrow; ventral scales much larger than above, smooth, pointed and strongly imbricate; 2 enlarged postcaudal spurs on either side of tail base.

Back with three pronounced, brown, longitudinal stripes, one vertebral and two paravertebral, running from occiput to tail. These stripes are interrupted by a series of six thin, white, transverse, irregular/broken bands which are bordered with brown, one each on shoulder and sacrum and rest on dorsum. A paravertebral series of five, paired, creamish-white somewhat oval blotches between the transverse bands and longitudinal stripes. Two lateral, broken, creamish-white stripes present on the flank on each side. Of which the dorsal stripe starts from near the shoulder, reaches to tail base and in contact with transverse streaks. The ventral stripe runs from back of the jaw to the base of the tail. (Fig. 4)

Upper surface of head dark brown with alternately arranged creamish-white transverse streaks. A whitish streak running from the rostral, passing through orbit and above

ear, which connects with transverse band on shoulder on both the sides, in some this band is entire and in a few it is broken. Rostral and anterior one or two supralabials dark brown; upper half of subsequent one or two supralabials brown, remaining supralabials whitish. Lower half of infralabials brownish and remaining portion whitish. There are small brownish dots visible in the whitish portion of both, supralabials and infralabials. Anterior supralabials creamish-white mottled with dark brown, which gives them a brownish appearance. Posterior supralabials creamish-white again mottled, with grayish brown. Forelimbs and hindlimbs brown with irregular, narrow white bands above and below elbows continuing on hands/feet and digits. Original portion of the tail dark brown with six creamish-white, broken, thick transverse bands. A whitish, unbroken, lateral streak running from base of the tail to the tip is present on both the sides. The regenerated tail portion is mottled with dark brown and white. In juveniles the tail is sometimes bright orange ventrally. Body venter creamish-white, semi-translucent, with brownish markings on the lateral aspect of the abdomen. Tail venter with a series of three narrow, dark brown stripes, mid-ventral is entire, thin and bold, lateral pair thicker but appear broken. In preservative, coloration is similar to that in life, except ventral stripes on belly and tail, which are inconspicuous.

Distribution

Hemidactylus albofasciatus is one of the most poorly known geckos in India. This species has previously been recorded only from a few localities in Ratnagiri district, Maharashtra (Grandison and Soman 1963; Tikader and Sharma 1992). Recently collected specimens of *H. albofasciatus* from Malvan, Sindhudurg district, Maharashtra (16° 1' 52.10" N; 73° 31' 48.73" E) represent a new locality record of this species. This locality is about 100 km south of the presently known localities of this species. We have also recorded this species from Kunakeshwar (16° 20' 03.23" N; 73° 23' 29.83" E) in the Sindhudurg district.

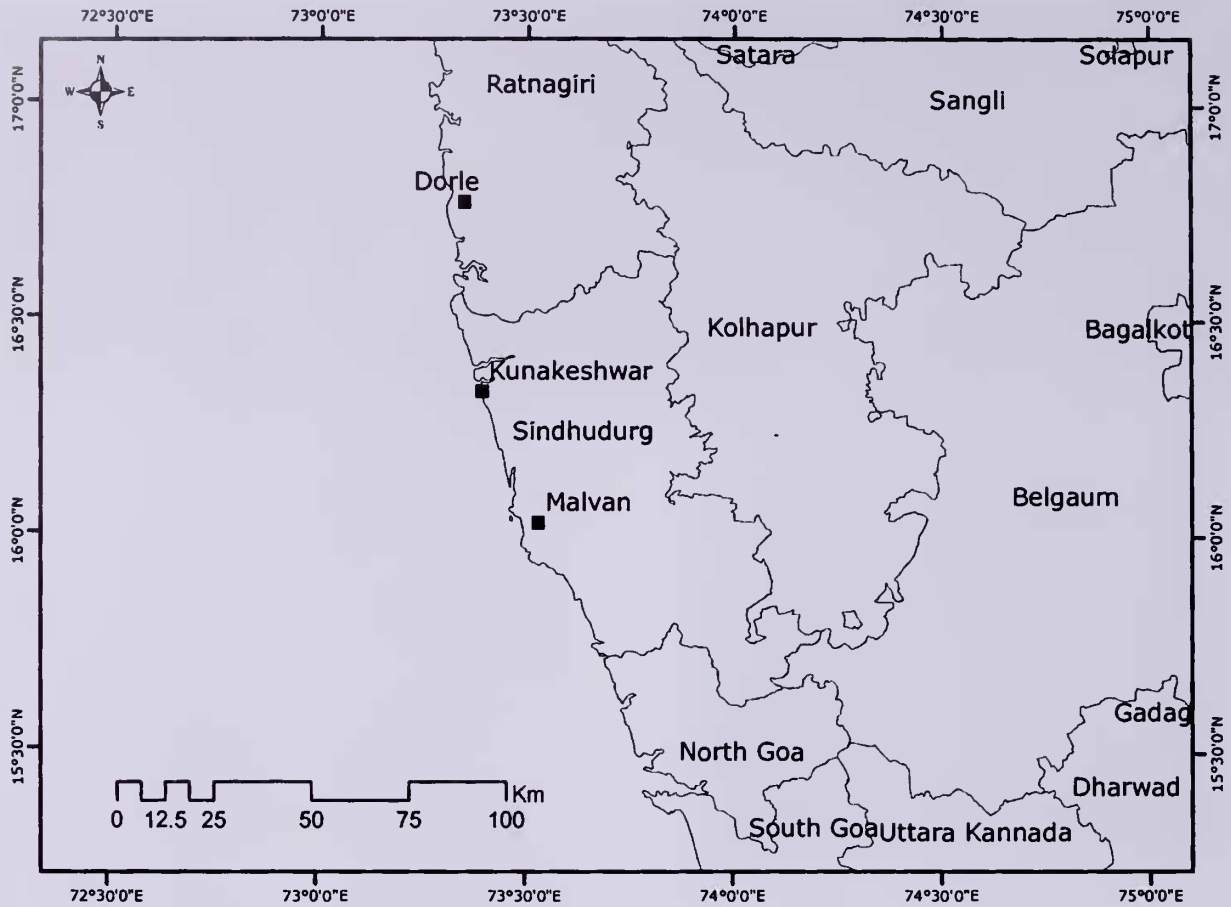


Fig. 5: Map showing different localities of *Hemidactylus albofasciatus*

This locality is roughly in between the type locality and Malvan. We have also reported this species from one of the type localities, Dorle (16° 46.35' N; 73° 20.8' E) in Ratnagiri district during our survey (Fig. 5).

Locality and habitat

The only information about the habitat for this species was provided by Grandison and Soman (1963) as 'open, rocky crests of hills bearing few patches of scrub mainly *Carissa*



Fig. 6: Habitat of *Hemidactylus albofasciatus* at Malvan, district Sindhudurg, Maharashtra

carandas and *Holarrhena antidysentrica*, the surrounding country is jungle of semi-evergreen nature.'

The recently collected specimens of *H. albofasciatus* from different plateaux near Malvan, Sindhudurg district, Maharashtra, are also from a similar habitat. This locality is barely 50 m above sea level. The habitat is similar to the type locality and other localities in Ratnagiri district from which this species has previously been reported (Fig. 6).

The coastal tract of Maharashtra and Goa, locally called 'Konkan', is one of the major geographic divisions of western India. The geomorphology of Konkan is characterized by a coastal plain of variable altitude and width, backed by the escarpment of the Western Ghats on the east and the Arabian Sea, with or without a cliff, on the west. It covers a north south distance of about 720 km, with an average width of 60 km.

Another unique feature of the Konkan coast is the presence of plateaux, locally called 'sada'. These plateaux are mostly present on the crest of small hills or mountains, generally at lower altitudes, on the coastal belt between the Arabian Sea and Western Ghats. Although the habitat is degraded due to anthropogenic pressure, there are comparatively less disturbed patches of semi-evergreen forest

in the valleys in some localities. These are mainly lateritic plateaux that appear barren due to sparse vegetation, except during the monsoon when they are mostly covered with grass and a variety of monsoon flora. The herpetofaunal diversity is mainly composed of *Ophisops* sp., *Lygosoma guentheri*, *Echis carinata*. Apart from this, an endemic species of caecilian *Gegeneophis seshachari* is also known from these plateaux.

Natural History

These plateaux were visited by us in different seasons from 2003 to 2008. We observed that *H. albofasciatus* mostly hide under rocks during the day. Though we never observed any eggs, the juveniles are mostly seen in June to August. The ventral part of the tail of juveniles is bright orange. We also observed variation in the thickness of tails; a few geckos had fat tail, while others were slender. The adults mostly remain motionless when the rock above them is turned. The typical behaviour of ground dwelling species, raising the fore-body and neck is also observed in this species. The juveniles are comparatively active and escape at a slight disturbance. It appears to be a poor climber; unlike its congener *Hemidactylus* cf. *brookii*, which can climb on or adhere to the rocks it uses for retreat sites. This species appears solitary as we rarely observed more than one gecko under a rock. Nonetheless, it is one of the commonest species of lizards on certain plateaux visited by us. On every plateau, though the habitat appears uniform, the geckos are unevenly distributed. Our team of five observed 16 individuals of this species in 25 minutes of active search on one of the plateaux near Malvan in July 2007. Of these, seven individuals were juveniles. All these individuals were concentrated on a small portion (approx. 100 m x 100 m) of this plateau. An intensive search for a longer duration on other parts of the same plateau at the same time yielded only two geckos. We also spotted 20 adult *H. albofasciatus* in approximately 20 minutes on a plateau near Dabhih-Ambere in the Ratnagiri district in October 2003. Here also they were concentrated in a small portion of the available habitat. One of the authors (HK) spotted three adults and one juvenile on a plateau near Kunakeshwar in Ratnagiri district.

This species is found sympatrically with *Hemidactylus* cf. *brookii*, *Ophisops* sp., *Lygosoma guentheri*, *Echis carinata* and an endemic amphibian, *Gegeneophis seshachari*, in most of the localities visited by us.

CONCLUSION

Our observations on morphological characters confirm that this gecko belongs to a largely terrestrial subgroup of genus *Hemidactylus* that has recently been identified as a

distinct clade (Bauer *et al.* 2008). There have been several new additions to Indian *Hemidactylus* in recent years (Giri and Bauer 2008; Giri 2008; Giri *et al.* 2009; Mahony 2009). This necessitates a proper taxonomic study of the earlier described species of Indian *Hemidactylus*. Ambiguities in taxonomic characters may lead to wrong identification. The redescription provided here may mitigate taxonomic problems related to ground dwelling species of Indian *Hemidactylus*.

Hemidactylus albofasciatus is considered as one of the most poorly known geckos, but they are commonly seen in the area of their occurrence. The typical body form and toe morphology are consistent with its ground-dwelling habits. Apart from this, *H. albofasciatus* is a habitat specific gecko and is mainly known to occur on the plateaux along the coastal belt in Maharashtra. Though this species is presently known from a few localities, in view of their habitat preference and availability of likely habitat, mostly in the Ratnagiri and Malvan districts, it is likely that they occur even further towards the north and/or south. These plateaux appear barren, but have unique faunal diversity which is mainly comprised of representatives of drier habitats. Interestingly, no efforts have been made to document this diversity in greater detail, and thus these plateaux remain one of the least studied habitats in India.

As per our preliminary observations, *H. albofasciatus* appears to be unevenly distributed, thus studies related to their microhabitat preference are essential for their conservation. Though these plateaux are undisturbed, some anthropogenic activities like grazing and collection of rocks for building compound walls were observed at certain places. Further studies related to their natural history and population need to be undertaken.

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